

**REMARKS/ARGUMENTS**

Claims 14-16, 19, and 30-34 are pending.

Claim 15 was rejected under 35 U.S.C. § 102(e) for allegedly being anticipated by Tomiyasu et al., U.S. Publication No. 2002/0119350.

Claim 30 was rejected under 35 U.S.C. § 103 for allegedly being obvious in view of Tomiyasu et al.

It is acknowledged that claims 14 and 16 as previously amended are allowed.

It is noted with appreciation that claim 19 recites allowable subject matter. As previously presented, claim 19 depended from claim 15, which was rejected. Claim 19 has been amended to depend from allowed claim 16.

Dependent claims 31-34 have been appended, and depend from claim 15.

For the reasons set forth below, it is earnestly submitted that claim 15 and claim 30 as previously presented are patentable over Tomiyasu et al.

The present invention recites a first seed layer and a second seed layer, each of which can include CrTi. The use of two seed layers of CrTi not only enables the formation of fine crystalline particles in the magnetic layer, but also enables the magnetic layer to have strong orientation of the easy magnetization axis. This aspect of the present invention is not discussed by Tomiyasu et al.; however, it is an important consideration in the present invention for improvements in high density magnetic recording.

The examiner asserted that the CrTi in the "initial growth film" (i.e., the upper layer 22 in Fig. 1) disclosed by Tomiyasu et al. corresponds to the recited "first seed layer", and that the recited "second seed layer" is shown by the remaining no-initial growth portion of the CrTi. With all due respect, Applicant earnestly submits the examiner is in error on this point.

Applicant firstly notes that Tomiyasu et al. do not show in any of their figures that the upper layer 22 of Fig. 1 constitutes anything but a single layer of material. In addition, there is no discussion that suggests that upper layer 22 is anything but a single layer of material.

Secondly, Applicant submits that the layer that is referred to by Tomiyasu et al. as the "initial growth film" is a seed layer from which the upper layer 22 is formed. Applicant very

respectfully submits that the examiner perhaps has misunderstood the portion of the Tomiyasu et al. reference (paragraph 30) that describes the "initial growth film". Paragraph 30 states:

The layer of the upper layer made of the Cr alloy has a work of an initial growth film of a film formed thereon. To have the work of the initial growth film, as an element added to Cr, at least one selected out of Zr, Nb, W, V, Ti, Mo, Ta, Ni, and Hf can be selected. The material containing Cr and the above element can obtain a fine crystal grain diameter and has a nature that the grain diameter distribution becomes very small. Accordingly, with avoiding an influence of thermal fluctuation, S/N ratio can be considerably improved as about 2 to 4 dB, and an improvement of PW 50 value (half pulse width of isolated reproduction signal) can be intended. Like the above description, to the Cr alloy of the upper layer, another element can be added without departing from the above effect. For example, B, C, O, or the like can be mentioned. The contents of these elements are preferably suppressed to 10 at % or less. Besides, the above element (at least one element selected out of Zr, Nb, W, V, Ti, Mo, Ta, Ni, and Hf) contained in the upper layer is preferably 10 to 50 at % for having the above effect. *Paragraph 30 (underlining added to highlight).*

Tomiyasu et al. disclose that "the Cr alloy has a work of an initial growth film of a film formed thereon." This merely teaches that the Cr alloy serves to initiate the growth of a "film." As can be seen from Fig. 1, the "film" is layer 3 which comprises NiAl (paragraph 67). Tomiyasu et al. further teach that the initial growth film (upper layer 22) facilitates the formation of uniformly sized crystal grains in the seed layer. Kindly refer to paragraph 83.

Since the initial growth film constitutes the upper layer 22 and the layer that is grown upon the initial growth film is the seed layer 3, there is no "remaining non-initial growth portion of the CrTi compound" as the examiner asserts.

It is respectfully submitted, therefore, that the examiner is incorrect in the assertion that there is a "remaining non-initial growth portion of the CrTi compound" that can be identified as corresponding to the recited second seed layer. Consequently, it is believed that claim 15 and its dependent claims 30-34 are deemed to be patentable over the cited for at least the reason that Tomiyasu et al. do not show or suggest the first seed layer and second seed layer as recited in claim 15.

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**CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



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